

**SEMICONDUCTOR PACKAGE WITH ENHANCED ELECTRICAL
AND THERMAL PERFORMANCE AND METHOD FOR
FABRICATING THE SAME**

5 **ABSTRACT OF THE DISCLOSURE**

 A BGA (ball grid array) package with enhanced electrical and thermal performance, and a method for fabricating the BGA package, are proposed. This BGA package is characterized by the use of a power-connecting heat spreader and a ground-connecting heat spreader, which are respectively used to electrically connect power pad and ground pad to
10 a packaged chip as well as to dissipate heat generated by the chip during operation. The ground-connecting heat spreader is arranged to entirely cover the chip, and thereby provides good shielding effect for the chip, which helps improve electrical performance of the chip during operation. Further, the ground-connecting heat spreader is partly exposed to outside of an encapsulation body that encapsulates the chip, by which satisfactory
15 heat-dissipation efficiency can be achieved.

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